

Observations of Minor Planets from Photographs taken with the 30-inch Reflector of the Thompson Equatorial at the Royal Observatory, Greenwich, during the year 1904.

(Communicated by the Astronomer Royal.)

The following positions of minor planets were obtained from photographs taken with the 30-inch Reflector during the year 1904.

The plates were measured with the astrographic micrometer. Four reference stars were, as a rule, measured with the planet, their positions being derived when possible from the Catalogues of the Astronomische Gesellschaft.

The positions given are not corrected for Parallax.

$\log \text{Parallax Correction} = \log \text{Parallax Factor} - \log \Delta.$

Date and G.M.T. 1904.				Apparent R. A.			Apparent Dec.			Log. Parallax Factor.	
d	h	m	s	h	m	s	°	'	"	R.A.	Dec.
(388) Charybdis.											
Feb. 15	11	14	15	8	37	23.50	+25	8	58.7	+8.423	+0.588
(37) Fides.											
Feb. 13	9	16	7	8	38	15.32	+22	51	42.0	-9.271	+0.646
15	10	20	15	8	36	30.84	+22	54	28.3	-8.817	+0.624
17	10	31	32	8	34	53.47	+22	56	38.6	-8.469	+0.621
18	9	0	26	8	34	10.21	+22	57	28.1	-9.241	+0.642
(106) Dione.											
Feb. 8	10	43	15	8	51	22.22	+24	1	3.2	-9.002	+0.612
13	9	40	59	8	47	21.28	+24	15	35.3	-9.217	+0.622
15	10	45	13	8	45	46.07	+24	20	50.0	-8.605	+0.601
17	11	14	14	8	44	15.15	+24	25	34.7	+8.448	+0.599
18	9	24	5	8	43	34.78	+24	27	36.0	-9.192	+0.617
(313) Chaldea.											
Feb. 13	10	7	58	9	22	52.37	+1	43	1.5	-9.210	+0.826
18	9	45	8	9	19	6.55	+2	46	31.8	-9.206	+0.820
(505) Cava.											
Feb. 15	7	7	9	4	59	26.67	+25	19	57.2	-8.423	+0.585

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Date and G.M.T. 1904.				Apparent R.A.	Apparent Dec.	Log. Parallax	Factor.
d	h	m	s	h m s	° ' "	R.A.	Dec.
(454) Mathesis.							
Mar. 10	9	40	24	10 20 17.95	+19 29 59.2	-9.158	+0.677
15	10	19	20	10 16 8.23	+19 35 36.0	-8.609	+0.665
16	10	11	8	10 15 22.35	+19 36 8.9	-8.675	+0.665
(334) Chicago.							
Mar. 10	10	17	29	10 44 52.75	+10 57 47.2	-9.079	+0.759
16	10	36	16	10 41 22.74	+11 21 57.5	-8.673	+0.752
(47) Aglaja.							
Mar. 10	10	54	17	10 53 21.84	+ 9 48 15.1	-8.870	+0.766
16	10	56	33	10 48 31.24	+10 9 4.9	-8.386	+0.762
21	11	21	12	10 44 43.14	+10 24 16.4	+8.728	+0.760
(134) Sophrosyne.							
Mar. 21	10	53	3	11 57 6.16	-4 59 54.4	-9.025	+0.862
Apr. 6	10	14	22	11 41 50.68	-4 23 37.0	-8.635	+0.860
9	11	4	22	11 39 21.15	-4 17 3.0	+8.771	+0.860
12	10	33	53	11 37 5.26	-4 11 1.3	+8.505	+0.859
(46) Hestia.							
Apr. 6	10	44	2	11 47 34.42	+1 28 10.5	-7.903	+0.827
9	11	35	41	11 45 22.72	+1 44 27.8	+8.984	+0.826
12	11	0	24	11 43 21.85	+1 59 28.1	+8.804	+0.824
(19) Fortuna.							
Apr. 9	12	0	6	11 54 36.68	-0 30 15.1	+9.082	+0.839
12	11	27	0	11 52 27.80	-0 14 18.3	+8.955	+0.837
(288) Glauke.							
Apr. 15	10	46	36	12 43 47.46	+3 30 59.7	-8.565	+0.813
18	9	47	51	12 41 50.39	+3 41 49.6	-9.031	+0.813
21	11	18	59	12 39 58.55	+3 51 5.2	+8.771	+0.811
(403) Cyane.							
Apr. 15	11	20	34	12 55 19.51	-16 56 23.3	-00	+0.911

Date and G.M.T. 1904.				Apparent R.A.			Apparent Dec.			Log. Parallax Factor.	
d	h	m	s	h	m	s	°	'	"	R.A.	Dec.
(317) Roxane.											
Apr. 15	11	55	2	12	57	59.69	-3	46	54.9	+8.708	+0.857
18	10	13	20	12	55	20.35	-3	29	18.2	-8.948	+0.855
(478) Tergeste.											
Apr. 15	12	24	4	13	9	2.07	-18	27	7.7	+8.913	+0.914
18	10	52	17	13	6	55.91	-18	2	50.2	-8.687	+0.914
May 3	9	52	26	12	57	43.24	-15	56	18.0	-8.521	+0.908
(121) Hermione.											
May 18	10	28	59	15	39	42.22	-15	49	46.7	-9.144	+0.902
19	10	25	36	15	38	56.63	-15	48	37.6	-9.140	+0.903
31	10	26	44	15	30	0.93	-15	36	33.1	-8.650	+0.907
June 3	10	39	31	15	27	54.95	-15	34	16.5	-7.220	+0.907
(90) Antiope.											
May 18	10	59	36	15	48	12.92	-19	13	5.0	-9.029	+0.914
19	11	3	26	15	47	22.69	-19	11	9.4	-8.972	+0.915
31	11	13	51	15	37	29.78	-18	48	13.6	+8.306	+0.917
(79) Eurynome.											
May 18	11	31	28	16	10	8.24	-16	55	13.9	-8.951	+0.909
19	11	48	16	16	9	10.23	-16	51	14.5	-8.726	+0.911
31	10	52	42	15	57	40.48	-16	5	26.7	-8.681	+0.908
June 3	11	36	22	15	54	51.46	-15	54	37.3	+8.682	+0.908
(153) Hilda.											
May 18	12	5	30	16	9	8.83	-18	19	39.6	-8.527	+0.915
(176) Idunna.											
June 3	12	8	10	16	34	24.59	+2	5	38.3	+8.546	+0.823
(322) Phæo.											
June 20	11	44	54	17	41	49.22	-20	25	32.9	-7.533	+0.913
July 5	12	1	37	17	27	56.92	-19	37	49.2	+9.163	+0.912
6	10	55	49	17	27	9.34	-19	34	58.4	+8.660	+0.918
8	11	2	37	17	25	32.43	-19	29	8.1	+8.860	+0.917

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Date and G.M.T. 1904.				Apparent R.A.	Apparent Dec.	Log. Parallax Factor.	
d	h	m	s	h m s	° ' "	R.A.	Dec.
(217) Eudora.							
July 6	11	54	38	17 39 55.81	-5 32 37.9	+9.061	+0.865
8	11	48	36	17 38 37.13	-5 41 41.6	+9.078	+0.865
9	12	29	54	17 37 58.32	-5 46 42.3	+9.271	+0.863
11	11	6	18	17 36 48.81	-5 56 45.6	+8.875	+0.868
(419) Aurelia.							
June 18	11	29	32	18 34 19.55	-17 39 12.2	-9.108	+0.909
20	12	14	47	18 32 46.38	-17 33 59.8	-8.585	+0.913
July 1	11	3	37	18 23 59.46	-17 11 37.8	-8.844	+0.911
6	12	14	5	18 20 4.20	-17 4 46.8	+8.935	+0.910
(364) Isara.							
July 6	13	11	46	20 16 9.54	-21 26 19.2	-8.013	+0.924
8	13	14	17	20 14 19.22	-21 38 27.8	+8.014	+0.924
15	11	38	22	20 7 23.58	-22 21 30.6	-8.974	+0.923
20	11	51	35	20 2 1.29	-22 52 31.6	-8.469	+0.927
21	11	11	35	20 0 57.75	-22 58 21.0	-8.952	+0.924
(483) Seppina.							
July 20	13	31	25	20 44 46.44	+2 15 51.3	+8.804	+0.822
Aug. 2	11	20	2	20 36 19.55	+1 10 8.9	-8.707	+0.829
6	11	9	26	20 33 41.31	+0 44 47.7	-8.583	+0.832
8	10	38	36	20 32 24.21	+0 31 29.0	-8.863	+0.833
(115) Thyra.							
Aug. 2	11	52	49	20 54 15.72	-16 46 59.1	-8.477	+0.911
8	11	18	4	20 47 17.32	-16 37 37.3	-8.564	+0.910
12	10	18	24	20 42 44.02	-16 30 50.6	-9.009	+0.907
17	10	26	52	20 37 13.10	-16 21 27.3	-8.667	+0.909
(511) Davida.							
July 20	13	1	12	20 31 49.86	-24 24 8.5	+8.586	+0.929
(539) Pamina.							
Aug. 8	11	55	29	21 20 9.94	-6 55 32.7	-9.080	+0.871
12	11	7	38	21 16 36.39	-6 59 31.2	-8.867	+0.873
17	11	7	37	21 12 8.46	-7 6 34.0	-8.528	+0.874

Date and G.M.T. 1904.				Apparent R.A.	Apparent Dec.	Log. Parallax	Factor.
d	h	m	s	h m s	° ' "	R.A.	Dec.
(236) Honoria.							
Aug. 8	12	22	17	21 17 22.40	- 5 20 3.0	+8.351	+0.865
12	10	40	55	21 14 22.18	- 5 44 14.6	-9.050	+0.866
17	10	48	11	21 10 35.02	- 6 17 35.6	-8.784	+0.870
18	11	7	39	21 9 50.11	- 6 24 35.4	-8.382	+0.871
(372) Palma.							
Aug. 18	12	39	15	22 13 16.96	- 10 6 21.7	+8.356	+0.887
Sept. 3	9	26	32	21 57 43.84	- 9 56 22.2	-9.200	+0.881
7	9	23	33	21 53 58.20	- 9 53 10.9	-9.125	+0.883
9	9	48	48	21 52 8.02	- 9 51 21.3	-8.897	+0.885
(389) Industria.							
Sept. 3	9	48	54	22 15 54.24	+ 0 27 27.5	-9.177	+0.833
7	9	46	18	22 12 29.89	+ 0 11 8.5	-9.103	+0.835
9	10	24	0	22 10 49.87	+ 0 2 34.0	-8.721	+0.836
16	9	12	17	22 5 32.92	- 0 27 35.0	-9.054	+0.839
(95) Arethusa.							
Sept. 7	10	14	0	22 23 46.92	+ 11 33 29.2	-9.006	+0.753
9	10	50	35	22 22 18.94	+ 11 21 46.8	-8.442	+0.752
12	11	8	59	22 20 12.51	+ 11 3 11.3	+8.388	+0.754
(284) Amalia.							
Sept. 3	11	4	12	23 23 0.11	+ 11 38 25.2	-9.146	+0.755
7	10	47	1	23 19 40.24	+ 11 9 28.9	-9.136	+0.759
9	11	47	9	23 17 56.45	+ 10 53 3.4	-8.415	+0.755
16	9	45	9	23 12 11.47	+ 9 50 59.4	-9.216	+0.772
(331) Etheridgea.							
Sept. 9	12	12	13	23 16 30.46	- 10 58 33.5	+8.253	+0.891
Oct. 3	9	14	12	22 58 44.98	- 11 43 26.8	-8.957	+0.892
(405) Thia.							
Sept. 19	9	19	48	23 50 26.78	+ 16 58 5.5	-9.384	+0.725
20	10	12	45	23 49 33.81	+ 16 52 9.0	-9.205	+0.708
Oct. 3	7	53	18	23 38 55.46	+ 15 26 25.8	-9.423	+0.745
8	9	34	25	23 35 8.40	+ 14 48 35.9	-8.930	+0.721
12	9	46	10	23 32 24.11	+ 14 17 56.1	-8.559	+0.723

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Date and G.M.T. 1904.				Apparent R.A.	Apparent Dec.	Log. Parallax	Factor.
d	h	m	s	h m s	° ' "	R.A.	Dec.
(373) Melusina.							
Sept. 19	10	36	16	0 1 27.41	- 2 53 23.3	-9.152	+0.851
Oct. 3	9	50	34	23 48 18.73	- 2 42 33.8	-9.036	+0.851
8	10	7	27	23 44 1.02	- 2 36 7.2	-8.650	+0.851
12	10	10	58	23 40 52.74	- 2 29 33.8	-7.982	+0.851
(258) Tyche.							
Sept. 16	10	11	5	23 59 2.79	+ 14 4 27.0	-9.298	+0.741
19	9	2	31	23 57 15.55	+ 13 27 36.7	-9.429	+0.761
20	9	57	23	23 56 37.38	+ 13 14 7.4	-9.281	+0.747
27	10	43	0	23 52 19.98	+ 11 36 48.9	-8.863	+0.750
(375) Ursula.							
Sept. 19	9	42	6	0 1 59.20	+ 11 33 33.8	-9.347	+0.766
20	10	31	20	0 1 2.27	+ 11 33 17.4	-9.164	+0.756
Oct. 3	8	26	10	23 49 20.87	+ 11 20 17.2	-9.369	+0.769
8	10	32	5	23 45 5.19	+ 11 11 29.6	-7.814	+0.753
(370) Modestia.							
Oct. 3	10	30	57	0 25 11.04	+ 18 39 30.5	-9.034	+0.682
8	10	57	55	0 20 22.26	+ 18 11 5.2	-8.372	+0.681
12	11	4	57	0 16 45.25	+ 17 45 7.6	+8.304	+0.686
13	10	1	31	0 15 54.76	+ 17 38 37.8	-8.884	+0.690
(68) Leto.							
Sept. 16	11	45	16	1 7 57.01	- 2 13 55.3	-9.190	+0.848
19	10	55	53	1 5 46.97	- 2 20 35.5	-9.309	+0.847
20	10	51	3	1 5 0.96	- 2 22 49.0	-9.309	+0.847
27	11	5	31	0 59 10.98	- 2 37 53.8	-9.138	+0.850
Oct. 3	10	58	42	0 53 47.49	- 2 48 47.7	-9.011	+0.852
Nov. 3	9	48	35	0 30 19.77	- 2 33 46.7	+8.158	+0.851
(482) Petrina.							
Oct. 3	11	19	54	0 49 1.97	- 0 45 10.5	-8.803	+0.831
13	10	28	10	0 42 10.62	- 0 38 54.3	-8.863	+0.840
(447) Valentina.							
Oct. 13	11	23	10	0 48 28.96	- 1 36 59.8	+7.681	+0.845
14	11	45	59	0 47 41.85	- 1 40 30.5	+8.694	+0.846

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Date and G.M.T. 1904.				Apparent R.A.	Apparent Dec.	Log. Parallax Factor.	
d	h	m	s	h m s	° ' "	R.A.	Dec.
(546) Herodias.							
Oct. 14	11	5	10	0 57 14.71	+ 3 53 53.3	- 8.505	+ 0.811
(335) Roberta.							
Nov. 12	9	53	56	2 21 38.28	+ 5 50 34.0	- 8.986	+ 0.798
14	9	48	59	2 19 56.89	+ 5 43 42.7.	- 8.957	+ 0.799
(17) Thetis.							
Nov. 12	9	29	0	2 21 42.55	+ 4 54 36.3	- 9.129	+ 0.806
14	9	25	14	2 19 59.71	+ 4 48 53.5	- 9.104	+ 0.806
(170) Maria.							
Nov. 12	10	53	51	2 32 29.58	+ 38 55 55.8	- 8.392	+ 0.275
14	10	54	13	2 30 22.26	+ 38 41 29.8	- 7.612	+ 0.283
(178) Belisana.							
Nov. 14	11	22	22	2 27 5.87	+ 14 9 55.4	+ 8.693	+ 0.725
(298) Baptistina.							
Dec. 5	10	26	8	3 13 40.46	+ 27 17 9.6	+ 8.255	+ 0.553
7	8	55	47	3 11 47.93	+ 27 10 44.6	- 9.099	+ 0.569
(443) Photographica.							
Dec. 5	10	58	53	3 19 56.19	+ 11 30 35.4	+ 8.767	+ 0.751
7	9	26	48	3 18 19.53	+ 11 25 26.4	- 8.881	+ 0.752
(154) Bertha.							
Nov. 14	11	49	48	4 36 54.73	+ 37 17 59.6	- 9.158	+ 0.360

Observations of Occultations of Stars by the Moon, made at the Royal Observatory, Greenwich, in the Year 1906.
(Communicated by the Astronomer Royal.)

Jan. 1907.

Occultations of Stars by the Moon.

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Day, 1906.	Phenomenon.	Telescope.	Power.	Moon's Limb.	Mean Solar Time of Observation.	Observer.
					h m s	
January 4	Disapp. ξ^2 Ceti	Great Equatorial ...	670	Dark	4 12 3.57	W. B.
4	"	Astrographic Equatorial	225	"	4 12 2.34	H. F.
4	"	Sheepshanks Equatorial	100	"	4 12 3.03	J. S.
4	"	Great Equatorial (Corbett)	120	"	4 12 3.57	B. E.
10	" <i>g</i> Geminorum	Sheepshanks Equatorial	100	Bright	12 3 58.84	V.
February 3 (c)	" Aldebaran	Astrographic Equatorial ...	225	Dark	5 22 30.36	H.
3 (g)	"	Sheepshanks Equatorial	100	"	5 22 29.70	H. F.
3 (g)	"	Sheepshanks Equatorial (finder)	100	"	5 22 31.10	J. S.
3 (a)	Reapp.	Astrographic Equatorial	225	Bright	6 28 34.15	H.
3	"	Old Altazimuth ...	100	"	6 28 34.23	A. C.
3	"	Thompson Equatorial (Hodgson)	100	"	6 28 (38.02)	D. E.
3	"	Sheepshanks Equatorial ...	100	"	6 28 34.28	W. S.
3	Disapp. W. B. (2) IV. 724	Astrographic Equatorial	225	Dark	8 54 46.89	J. S.
4	" 115 Tauri	"	225	"	5 24 48.29	W. S.
4 (f)	Reapp.	"	225	Bright	6 33 10.60	W. S.
7 (c)	Disapp. ζ Cancri	"	400	Dark	7 6 59.59	H.
7 (e)	"	Great Equatorial	670	"	7 6 58.24	B.
7 (c)	"	Sheepshanks Equatorial ...	100	"	7 6 58.01	J. S.
7	"	Merz Refractor ...	250	"	7 6 57.44	P. M.
7	"	Thompson Equatorial ...	100	"	7 6 58.24	R. F.